

CLAIMS

1. Machine for working the soil, in particular a precision disc harrow, of the type comprising a chassis (1) provided with plowing tools in the form of at least one and preferably two successive series of non-driven discs (2, 3) and at least one deflector device (4) shaped to break the flow of dirt projected by the discs (2) from one of the series of discs (2, 3) and to ensure leveling of the ground,

characterized in that the deflector device (4) is, in its working portion, corresponding to the zone struck by a flow of dirt, constituted by a plurality of plates (5) adapted to oscillate, preferably resiliently, particularly under the action of the flow of dirt, to facilitate dislodging the dirt from said plates, said plates (5) being disposed side by side in the direction of the width of the machine and dimensioned to cover at least 45%, preferably at least 60%, of the total working width of said machine.

20

2. Machine for working the soil according to claim 1, characterized in that each plate (5) of group of plates (5), is provided with its own means (6, 7; 6', 7'; 6'', 7'') for connection to the machine for working the soil to be able to be mounted on the machine for working the soil independently of the other plates (5) or groups of plates (5).

25

3. Machine for working the soil according to claim 1, characterized in that at least one portion of the means (7) for connection of the plate (5) or group of plates (5) to the machine extend between the chassis (1)

30

and plate (5) or group of plates (5) and constitute moreover the support means for a member (9) for connection of the disc, located to the rear of said plate (5) or group of plates (5), to the chassis (1) of the machine.

5

4. Machine for working the soil according to claim 3, characterized in that the connection means of the plate (5) or group of plates (5) to the chassis (1) are constituted by at least two stirrups (6) adapted to overlap
10 a beam of the chassis (1) and a plate (7) closing the stirrups (6) in the condition positioned on the chassis (1), the elements of plates (5) being mounted securely on said plate (7).

15

5. Machine for working the soil according to claim 4, characterized in that the plate (7) has a throat (8) within which is introduced one end of the connection member (9) of the disc (2, 3) to the chassis (1), this connection member (9) being constituted preferably by a helicoidal
20 spring with at least one turn.

20

6. Machine for working the soil according to claim 1, characterized in that the deflector device (4) shaped to break the flow of dirt projected by the discs (2) of the
25 front series of discs is coupled preferably securely for movement with the so-called rear series of discs (3).

25

7. Machine for working the soil according to claim 1, characterized in that the means (6', 7'; 6'', 7'') for
30 connection of the plate (5) or group of plates (5) to the machine for working the soil extend between the plate (5)

30

or group of plates (5) and the disc (3) or member (9) for connecting the disc (3) to the chassis (1).

8. Machine for working the soil according to claim 1,
characterized in that each plate (5) is connected in its portion prolonging its working portion to a base common to said plates (5), this base (11) being itself adapted to be secured to the machine, the base (11) and working portion of the plates (5) being formed of a single piece.

9. Machine for working the soil according to claim 8,
characterized in that the plates (5) with their common base are obtained from a blank of sheet metal of generally rectangular appearance, sectioned over a portion of its width into a plurality of substantially parallel cutouts arising from a same free edge of the sheet metal blank to form said elements in the form of plates (5), this blank being if desired previously or subsequently to its cutting out, shaped to give it a generally curved profile.

10. Machine for working the soil according to one of claims 1 to 9,

characterized in that the plates (5) are aligned along a line substantially perpendicular to the direction of advance of the chassis (1), and corresponding to the working width of the machine.

11. Machine for working the soil according to one of claims 1 to 9,

characterized in that the plates (5) are positioned in an axially offset manner relative to the direction of advance of the chassis (1).

12. Machine for working the soil according to claim 1,
characterized in that the plates are provided on their
back with a seat depositor (10).

5

13. Deflector device of the type shaped to break the
flow of dirt projected by the discs (2, 3) of a machine for
working the soil, such as a disc harrow, provided with at
least one, preferably two successive series of discs (2,
10 3), characterized in that the deflector device is, in its
working portion corresponding to the zone struck by a flow
of dirt, constituted by a plurality of plates (5) adapted
to oscillate, preferably resiliently, particularly under
the action of the flow of dirt, these plates (5) being
15 positionable side by side in the direction of the working
width of the chassis (1) of the machine to be provided by
means of connection means (6, 7; 6', 7'; 6'', 7'') to the
suitable machine.

20 14. Deflector device according to claim 13,
characterized in that the plates (5) and their means
(6, 7; 6', 7'; 6'', 7'') for connection to the machine are
in accordance with one of claims 1 to 12.

25

30